

REMARKS

Claims 1-23 are all the claims pending in the application. By this Amendment, Applicant amends claims 1, 9, 17 and 23 to further clarify the invention. In addition, Applicant adds claims 24 and 25, which are clearly supported throughout the specification. Finally, Applicant respectfully submits an Information Disclosure Statement listing an additional U.S. Patent to be considered. Also listed is the European Patent which has issued for the European counterpart to the present application.

I. Summary of the Office Action

The Examiner maintains some of the previous rejections and issues a new rejection for some of the claims. Specifically, claims 1, 2, 4, 5, 8-10, 12, 13, 16, 17, 19, 20, and 22 as well as previously added claim 23 remain rejected under 35 U.S.C. § 102(e) and claims 3, 6, 7, 11, 14, 15, 18, and 21 remain rejected under 35 U.S.C. § 103(a) but in view of a new secondary reference.

II. Claim Rejections under 35 U.S.C. § 102

Claims 1, 2, 4, 5, 8-10, 12, 13, 16, 17, 19, 20, 22, and 23 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,850,513 to Pelissier (hereinafter “Pelissier”). Applicant respectfully traverses these grounds of rejection at least in view of the following exemplary comments.

Of these rejected claims, only claims 1, 9, and 17 are independent. These independent claims *inter alia* and in some variation recite: data telegrams, each of which has reference data and an identifier and a transmission list, which includes a first number of the check data records,

where each of the check data records has an address identifying a memory location that stores the reference data of a respective data telegram and the identifier which uniquely identifies the respective one data telegram that is assigned to the respective one of the check data records.... a second number of the check data records provided for reception are separate data records from the first number of check data records provided for transmission.

That is, in an exemplary, non-limiting embodiment, check data records are disclosed that facilitate transmission and reception of data telegrams. Specifically, each data telegram includes reference data or user data and is assigned to a respective data record. Each data record uniquely identifies one data telegram and has a reference to a memory location where the data of the telegram is stored. In other words, each check data record corresponds to one telegram using a unique, global identifier. These check data records control the reception and transmission of the data telegrams where separate data records are used for transmission and reception.

It will be appreciated that the foregoing remarks relate to the invention in a general sense, the remarks are not necessarily limitative of any claims and are intended only to help the Examiner better understand the distinguishing aspects of the claims mentioned above.

The Examiner contends that Pelissier discloses each and every unique feature of the independent claims 1, 9, and 17. Specifically, the Examiner contends that having different records/table for transmission and reception is not recited in the claims (*see* page 12 of the Office Action). Applicant respectfully disagrees. However, to expedite the prosecution of the above-identified application, Applicant amends claims 1, 9, and 17 to further clarify that different data records are used for transmission and reception.

Pelissier clearly does not disclose or even remotely suggest having separate tables for transmission and reception. Applicant respectfully notes that transmission links 112 and 113 (alleged second number of check data records) are not records such as classification table records. In other words, Applicant respectfully submits that in Pelissier, there is only one classification table having various levels. That is, Pelissier does not disclose or even remotely suggest having different records/tables for transmission and reception.

Furthermore, in response to Applicant's arguments that Pelissier's classification tables (alleged transmission list) store types of data and do not uniquely identify a corresponding data packet, the Examiner alleges that the search key with destination and source addresses uniquely identifies the corresponding packet. The Examiner further notes that MAC address (of the source or destination node) is a unique address (*see* page 13 of the Office Action). This position is technically inaccurate.

Pelissier discloses that column 302 of the classification table 300 represents the search key. This column 302 is used to specify different destination addresses for packets transmitted over a Ethernet LAN ("MAC" addresses). Other classification information could also be used as the initial search key (e.g., the source address, application protocol) (Fig. 3; col. 4, lines 58 to 67). Applicant respectfully notes, however, that the MAC addresses (e.g., destination and source addresses) uniquely identify the nodes and not the packets. Since more than one packet can be transmitted from the same source node to the same destination node, it is impossible to use the search key (destination and source addresses) to uniquely identify the packet.

In other words, in Pelissier, one record (*e.g.*, data type .html) may identify a number of data packets *e.g.*, all packets of .pdf type and all packets being transmitted from node A to node B. That is, Pelissier does not disclose or even remotely suggest a record that uniquely identifies one corresponding packet. Furthermore, Pelissier does not disclose or even remotely suggest the record including a unique identifier of the packet and an address for a memory location where the data of the packet is stored. In Pelissier, MAC addresses identify location of the source node and the destination node and do not uniquely identify the packet. Furthermore, the MAC addresses do not uniquely identify memory location where the data for the packet is stored. MAC addresses only identify the source and destination nodes and fail to unique identify a packet.

In short, Applicant respectfully maintains that Pelissier only discloses determining the next link based on the destination address and determining the type of packet based on the classification table 300. Pelissier does not disclose or even remotely suggest a) having separate check data records for reception and for transmission and b) each record having an address for the reference data and the identifier which uniquely identifies a respective one of the data telegrams, as set forth in some variation in independent claims 1, 9, and 17. Pelissier lacks having a classification list where each entry will uniquely identify one corresponding packet. Pelissier also lacks having an entry in the classification list include an address to the memory location where the data of the packet is stored.

In summary, the deficiencies of the Pelissier reference fall to the Examiner's burden to show inherent inclusion of the claim elements. Therefore, for at least the above exemplary

reasons, independent claims 1, 9, and 17 are patentably distinguish from (and are patentable over) Pelissier. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claims 1, 9, and 17. Claims 2, 4, 5, 8-10, 12, 13, 16, 17, 19, 20, 22, and 23 are patentable at least by virtue of their dependency.

In addition, dependent claim 4 recites: “wherein the transmission list has at least one control data record, which determines the order of processing the first number of the check data records” and dependent claim 5 further recites: “wherein the control data record includes a conditional jump address to a check data record of the first number of the check data records.” The Examiner alleges that since based on the search key of Pelissier, another table key code may be used to jump to the next level in the classification table, the above-quoted unique features of claims 4 and 5 are disclosed in Pelissier (*see* pages 13-14 of the Office Action). Applicant respectfully disagrees.

Applicant respectfully maintains that Pelissier does not disclose or even remotely suggest the classification table (alleged transmission list) including any information relating to the sequence of transmission or order of processing the first number of check data records. Col. 6, lines 51 to 58 of Pelissier describe a “Classification Valid” field which indicates whether there are further levels of the classification tables *i.e.*, an additional level of the classification is present when it is set to false and no additional levels of the classification are available when it is set to true (Figs. 3 and 4). However, this field is unrelated to determining the order of processing of the records in the same classification table *i.e.*, on the same level and also does not disclose or suggest skipping records of the same level *i.e.*, in the same classification table.

For at least these additional exemplary reasons, claims 4 and 5 patentably distinguish over from Pelissier.

Dependent claim 23 recites: “the identifier of a corresponding check data record is a globally unique identifier corresponding to only one data telegram, the second number of the check data records only used for the received data telegrams is grouped such that the received data telegram is first matched with a corresponding group of the check data record based only on least significant bits in the identifier of the received data telegram and only then with a corresponding unique record based on the identifier, each of the check data records is an application frame control word, and the transmission list is sequentially processed by sequentially generating data telegrams for each of the check data records in the transmission list and wherein the received data telegrams are processed based on a reception list comprising the second number of check data records.”

Pelissier’s search key only identifies source and/or destination nodes and as such are not unique to the data packet *e.g.*, more than one packet can be transmitted from the same source node to the same destination node. Also, Pelissier does not disclose or suggest using only a portion of the search key *i.e.*, least significant bits, to first match the data telegram with a corresponding group of records. Furthermore, Pelissier does not disclose or even remotely suggest the search key being an application frame control word. Next table code of Pelissier is simply a code and is not an application frame control word. Moreover, Pelissier does not disclose or suggest a separate reception list. Finally, the search key of Pelissier is used to determine where to route a packet next and not to generate a packet.

For at least these additional exemplary reasons, claim 23 patentably distinguishes over (and is patentable over) Pelissier.

III. Claim Rejection under 35 U.S.C. § 103(a)

Claims 3, 6, 7, 11, 14, 15, 18, and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pelissier in view of a newly found reference, U.S. Patent Publication No. 2002/0126688 to Lindgren et al. (hereinafter “Lindgren”). Applicant respectfully traverses these grounds of rejection at least in view of the following exemplary comments.

Claims 3, 6, and 7 depend on claim 1, claims 11, 14, and 15 depend on claim 9, and claims 18 and 21 depend on claim 17. Applicant has already demonstrated that the disclosure of Pelissier does not meet all the requirements of independent claims 1, 9, and 17. Lindgren is relied upon only for its teaching of a cycle and cycle counter (*see* pages 11-12 of the Office Action) and as such fails to cure the deficient disclosure of Pelissier. Together, the combined teachings of these references would not have (and could not have) led the artisan of ordinary skill to have achieved the subject matter of claims 1, 9, and 17. Since claims 3, 6, and 7 depend on claim 1, claims 11, 14, and 15 depend on claim 9, and claims 18 and 21 depend on claim 17, they are patentable at least by virtue of their dependency.

In addition, the Examiner alleges that one of ordinary skill in the art would have been motivated to combine Lindgren with Pelissier “in order to increase data transmission rate and reduce delay” (*see* page 11 of the Office Action). However, Applicant respectfully submits that this amounts to a mere conclusory statement not substantiated by any objective evidence of record. For example, adopting transmission to a cycle increases complexity of the system and

delays, and it may also reduce transmission rates *e.g.*, if an entire packet cannot be sent in a particular cycle, it will need to wait until the next cycle but if there are no cycles, an entire packet is simply sent *i.e.*, the portion of the packet being sent during the interval that was previously a first cycle and the remaining portion of the packet being sent during the interval that was previously the next cycle. In other words, one of ordinary skill in the art would not have combined the two references for the reasons suggested by the Examiner.

Furthermore, dependent claim 6 recites: “wherein the control data record is formed such that a jump to the jump address occurs in every *n*th cycle.” The Examiner acknowledges that Pelissier does not disclose or suggest these unique features of claim 6. The Examiner, however, alleges that Lindgren cures these deficiencies in ¶ 65 (*see* page 11 of the Office Action). Applicant respectfully disagrees.

¶ 65 of Lindgren recites: “Transmission of data is managed correspondingly. When the node is to transmit data, data is out into the transmission table 29 in the position that corresponds to the time slot to be used for transmission. When the time slot counter 28 points to an entry in the transmission table 29 that has a flag indicating that data is to be sent in this particular time slot, the multiplexor 26 writes data into the time slot. This data is then, for example, transmitted to the multiplexor 11, shown in FIG. 1. The time slot counter is triggered by a PLL 27, which preferably is synchronised to PLL 20 or 23.” That is, Lindgren clearly does not disclose or even remotely suggest that a jump to a particular address occurs every *n*th cycle. For at least these additional reasons, claim 6 is patentable over Pelissier in view of Lindgren.

Claim 7 recites: “wherein the control data record is in a form such that the nth cycle is chosen by masking bit positions of a cycle number.” The Examiner acknowledges that Pelissier does not disclose or suggest these unique features of claim 7. The Examiner, however, alleges that Lindgren cures these deficiencies in ¶ 65 (see pages 11-12 of the Office Action). Applicant respectfully disagrees. As is clearly visible from ¶ 65 of Lindgren, quoted above, there is no disclosure or suggestion of any masking. For at least these additional reasons, claim 7 is patentable over Pelissier in view of Lindgren.

IV. New Claim

In order to provide more varied protection, Applicant adds claims 24 and 25, which are patentable by virtue of their dependency and for additional features set forth therein.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)
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